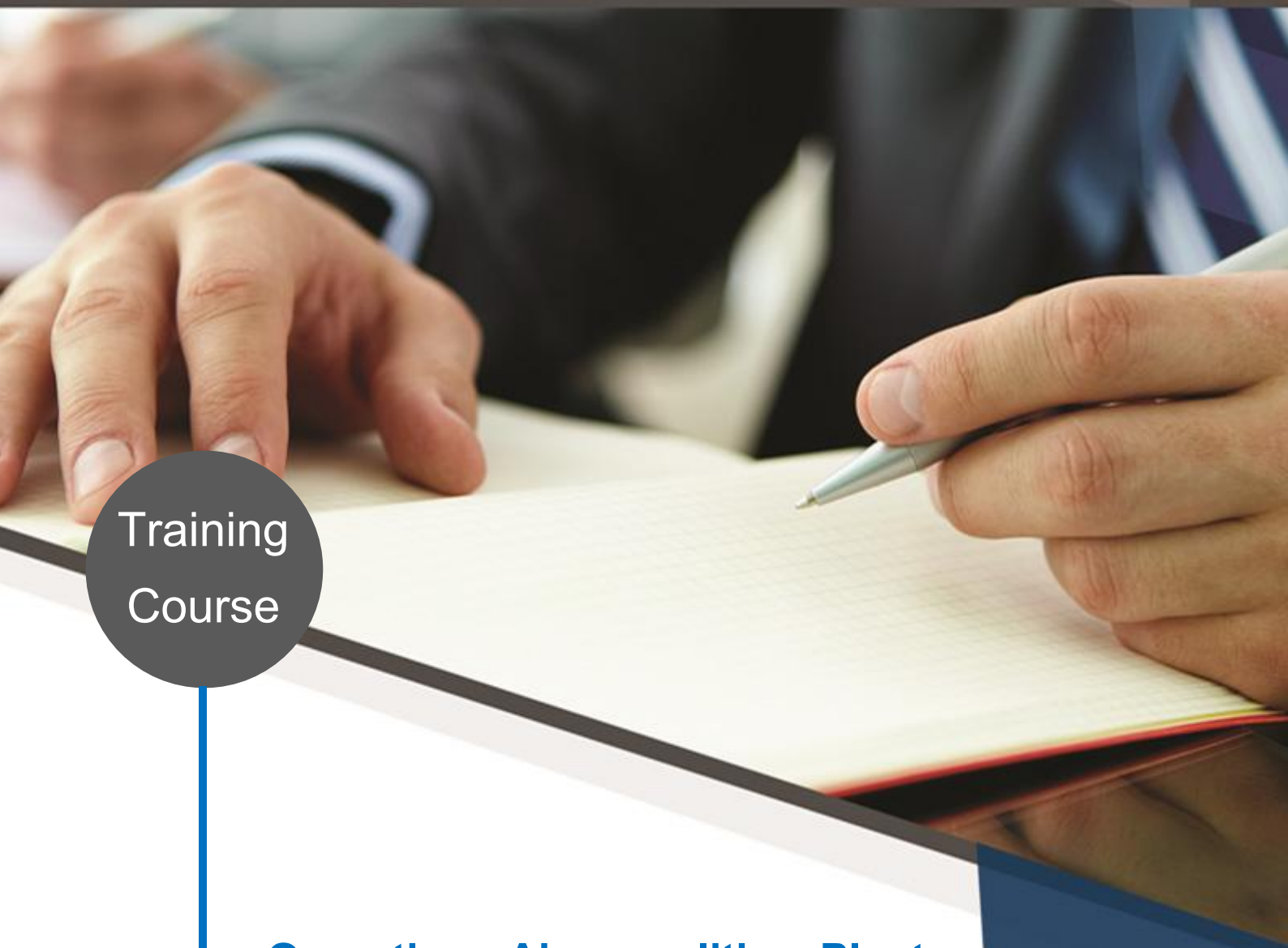
Skills International for Training & Consulting



Training Course

Operations Abnormalities, Plant Upset, and Problem Solving

Skills International for Training & Consulting

سكلز الدولية للتدريب والإستشارات

Course Plan

Introduction

Industrial plants and operational facilities often face abnormal situations and unexpected upsets that can significantly impact safety, production efficiency, equipment integrity, and profitability. This training course is designed to equip participants with the knowledge and practical skills required to identify, analyze, and respond effectively to operational abnormalities and plant upsets.

The course focuses on systematic problem-solving techniques, root cause analysis, and best practices for restoring normal operations while minimizing risks and downtime. Real-life case studies and operational scenarios will be used to enhance participants' analytical and decision-making capabilities in high-pressure environments

Course Objectives:

- ✓ Understand the nature and causes of operational abnormalities and plant upsets
- ✓ Recognize early warning signs of abnormal operating conditions
- ✓ Apply systematic approaches to troubleshoot plant disturbances
- ✓ Analyze process deviations using data and operational indicators
- ✓ Perform effective root cause analysis for recurring problems
- ✓ Minimize safety, environmental, and production risks during upsets
- ✓ Improve response time and decision-making under pressure
- ✓ Apply best practices for restoring stable operations
- ✓ Enhance communication and coordination during abnormal situations
- ✓ Develop preventive strategies to reduce future upsets

Who Should Attend?

- Operations Engineers
- Process Engineers
- Control Room Operators
- Shift Supervisors and Team Leaders
- Maintenance and Reliability Engineers
- Production and Plant Managers
- HSE and Safety Professionals
- Technical Staff involved in plant operations and troubleshooting

Training Methods:

- ✓ Online Video material.
- ✓ Presentation.
- ✓ Live Interactive sessions.
- ✓ Course presenter will make extensive use of all tools that will be needed for the virtual environment.
- ✓ Questions & Answers

Course Outline:

Day One

- Overview of Plant Operations and Process Stability
- Definition of Operations Abnormalities and Plant Upsets
- Common Causes of Operational Disturbances
- Human Factors and Operational Errors
- Equipment Failures and Mechanical Issues

Day Two

- Process Control System Limitations
- Early Detection of Abnormal Operating Conditions
- Alarm Management and Prioritization
- Data Analysis for Troubleshooting
- Understanding Process Interactions and Dependencies

Day Three

- Decision-Making During Abnormal Situations
- Structured Problem-Solving Methodologies
- Root Cause Analysis Techniques (RCA)
- Case Studies of Major Plant Upsets
- Emergency Response vs. Normal Upset Handling

Day Four

- Communication and Coordination During Upsets
- Role of Procedures and Standard Operating Practices
- Managing Start-Up, Shutdown, and Transient Conditions
- Risk Assessment During Operational Abnormalities
- Lessons Learned and Knowledge Sharing

Day Five

- Preventive and Predictive Measures
- Continuous Improvement in Operations
- Use of Checklists and Troubleshooting Guides
- Performance Monitoring and Key Indicators
- Developing an Upset Management and Prevention Plan

Training Details

Course Duration	5 Days
Pre-Schedule	23 – 27 March 2026
Venue	Sapin – Madrid – Preciados Hotel
Training Fees Per Person	KWD 1750 (One Thousand Sven Hundred Fifty)
Course Fees Include	✓ Tuition documentation ✓ Curriculum and Training Handout ✓ Five star Lunch ✓ Completion Certificates ✓ Lunch Included